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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,770	01/16/2002	Minoru Higuchi	NEC A326	7860
27667	7590	09/08/2004	EXAMINER	
HAYES, SOLOWAY P.C. 130 W. CUSHING STREET TUCSON, AZ 85701			DUONG, THOI V	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,770

Applicant(s)

HIGUCHI, MINORU

Examiner

Thoi V Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 ~~is~~/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 ~~is~~/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Amendment filed June 14, 2004.

Accordingly, claims 1-6 and 8-14 were amended. Currently, claims 1-14 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 3, 5, 8, 10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Teng et al. (Pub. No. US 2002/0005509 A1).

Re claims 1 and 8, Teng et al. discloses a display filter arranged in alignment with a screen of a plasma display unit, said display filter having a function of selectively absorbing undesired wavelengths other than wavelengths of red, green and blue lights. Since the display filter selectively absorbs only undesired wavelengths (such as incident

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visible light or incident external light) other than wavelengths of predetermined primary colors, the desired wavelengths corresponding to three primary colors, red green and blue, are permitted to pass therethrough (page 2, paragraphs 16 and 17 and page 3, paragraph 47).

Re claims 3 and 10, Teng et al. discloses that the filter comprising the dyes may be formed as a film on a suitable transparent substrate which is then adhered to the surface of the plasma unit (paragraph 71),

Finally, re claims 5 and 12, Teng et al. discloses that the filter comprising the dyes may be directly deposited on the surface of the plasma unit by a suitable process such as spray coating to form a suitable film (paragraph 73).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wani et al. (USPN 6,552,486 B1) in view of Nishizama et al. (JP 03-254048).

Re claims 1, 2, 8 and 9, as shown in Fig. 2, Wani et al. discloses a display panel including a plasma display unit 12 and a display filter 14 (transparent substrate) arranged in alignment with a screen of said plasma display unit, said display filter

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having a function of absorbing only incident external light III in an area where said display unit is used (col. 3, lines 40-43 and col. 4, lines 48-57).

Wani et al. discloses a display panel that is basically the same as that recited in claims 1, 2, 8 and 9 except that the display filter does not absorb incident visible rays having wavelengths other than wavelengths of red, green and blue lights, while permitting red, green and blue light emitted from the display unit to pass therethrough.

Nishizawa et al. discloses a display filter comprising a dye or pigment as recited in claims 7 and 14 (light absorber) having absorption between the green and the blue light-emission spectra and another dye or pigment having absorption between the green and red light-emission spectra (Abstract). Accordingly, the display filter absorbs the unwanted lights and permits red, green and blue lights from the display unit to pass therethrough.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display panel of Wani et al. with the teaching of Nishizawa et al. by incorporating a dye or pigment as light absorber so as to accomplish a high contrast display in which reflection of external light is reduced (Abstract).

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zieba et al. (USPN 5,811,923) in view of Teng et al. (Pub. No. US 2002/0005509 A1).

Re claims 1 and 8, as shown in Figs. 4A and 4B, Zieba et al. discloses a display filter 60 or 80 arranged in alignment with a screen of a plasma display unit (col. 9, lines

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21-27) for absorption of selective wavelengths and color correction to enhance the chromaticity of the display (col. 5, lines 37-42).

Re claims 2, 7, 9 and 14, as shown in Fig. 4B, Zieba et al. discloses:

(a) a transparent substrate 66 positioned in alignment with a screen of a plasma display unit; and

(b) a light absorber comprising of pigment 72 (dye material) mixed in said transparent substrate (col. 9, lines 56-58).

Re claims 3, 5, 10 and 12, as shown in Fig. 4A, Zieba et al. discloses:

(a) a transparent film 22 (optical selective coating);

(b) a light absorber mixed in said transparent film (col. 4, lines 49-61); and

(c) a transparent substrate 66 to which said transparent film is adhered, said transparent substrate being positioned in alignment with said screen.

Re claims 4, 6, 11 and 13, as shown in Fig. 4A, Zieba et al. discloses:

(a) a transparent film 22 having an upper and a lower surface, said film having an adhesive layer 70 on the lower surface;

(b) a light absorber mixed in said adhesive layer (col. 9, lines 41-43); and

(c) a transparent substrate 66 to which said transparent film is adhered through said adhesive layer, said transparent substrate being positioned in alignment with said screen,

said transparent film being adhered to said screen through said adhesive layer.

However, Zieba et al. does not discloses a display filter having the light absorber absorbing visible rays having a wavelength other than wavelengths of red, green and

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blue lights, while permitting red, green and blue light emitted from the display to pass therethrough.

Teng et al. discloses a display filter comprising a suitable dye as light absorber mixed in a transparent polymer matrix material (page 5, paragraph 69), said display filter having a function of selectively absorbing wavelengths other than wavelengths of red, green and blue lights. Since the display filter selectively absorbs only undesired wavelengths (such as incident visible light or incident external light) other than wavelengths of predetermined primary colors, the desired wavelengths corresponding to three primary colors, red, green and blue, are permitted to pass therethrough (page 2, paragraphs 16 and 17 and page 3, paragraph 47).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display panel Zieba et al. with the teaching of Teng et al. by forming a display filter having a light absorber absorbing visible rays having a wavelength other than wavelengths of red, green and blue lights so as to improve contrast and color enhancement for the display (page 2, paragraph 11).

Response to Arguments

7. Applicant's arguments filed June 14, 2004 have been fully considered but they are not persuasive.

Applicant argued that Teng fails to teach a filter or a light absorber for absorbing incident visible light having a wavelength other than the wavelength of red, green and blue lights while permitting red green and blue light emitted from the display to pass therethrough. The Examiner disagrees with Applicant's remarks since Teng clearly

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discloses that the filter is adapted to substantially selectively transmit predetermined primary color wavelengths (red, green and blue) as well as to selectively absorb wavelengths other than said predetermined primary color wavelengths (col. 2, paragraph 16 and col. 3, paragraph 47). Accordingly, the filter of Teng is designed to absorb incident visible light having undesired wavelengths only while permitting red green and blue light emitted from the display to pass therethrough for increasing overall color and improving contrast and color enhancement (col. 2, paragraph 11).

Applicant also argued that Wani does not teach a filter having a function of absorbing incident visible light rays having a wavelength other than the wavelength of red, green and blue lights while permitting red, green and blue light emitted from the display to pass therethrough and JP'048 does not supply the missing teaching, instead, JP'048 teaches absorbing totally different wavelengths. The Examiner disagrees since JP'048 discloses a filter having a dye or pigment to absorb lights between the green and blue light-emission spectra and between the green and red light-emission spectra. Accordingly, the filter absorbs only the unwanted light between colors and allows red, green and blue light to go through. Thus, JP'048 teaches a filter having a function of absorbing incident visible light rays having a wavelength other than the wavelength of red, green and blue lights while permitting red green and blue light emitted from the display to pass therethrough to reduce the reflection of external light.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

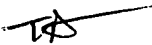
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (571) 272-2293.

Thoi Duong



09/02/2004



ROBERT H. KIM
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